Kenmar Associates Investor Education and Protection

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John Stevenson, Secretary Ontario Securities Commission 20 Queen Street West Suite 1900, Box 55 Toronto, Ontario M5H 3S8

Fax: (416) 593-8145

E-mail: jstevenson@osc.gov.on.ca

Anne-Marie Beaudoin, Secrétaire Autorité des marchés financiers Tour de la Bourse 800, square Victoria C.P. 246, 22^e étage Montréal, Québec H4Z 1G3

Fax: (514) 864-6381

E-mail: consultation-en-cours@lautorite.qc.ca

British Columbia Securities Commission
Alberta Securities Commission
Financial and Consumer Affairs Authority of Saskatchewan
Manitoba Securities Commission
Ontario Securities Commission
Autorité des marchés financiers
Financial and Consumer Services Commission (New Brunswick)
Superintendent of Securities, Department of Justice and Public Safety, Prince Edward Island
Nova Scotia Securities Commission
Securities Commission of Newfoundland and Labrador
Superintendent of Securities, Northwest Territories
Superintendent of Securities, Yukon
Superintendent of Securities, Nunavut

CSA Notice 81-324 and Request for Comment

Proposed CSA Mutual Fund Risk Classification Methodology for Use in Fund Facts http://www.osc.gov.on.ca/documents/en/Securities-Category8/csa_20131212_81-324_rfc-mutual-fund-risk.pdf

Disclosure Notice: I am a member of the OSC Investor Advisory Panel. The views expressed here are strictly the views of Mr. Kivenko.

Kenmar Associates is pleased to comment on this Consultation paper. We have studied mutual fund risk measures re retail investors for nearly 10 years. We commend the CSA's efforts in seeking ways to enhance information provided to investors concerning mutual fund risk characteristics. Kenmar

appreciate the huge effort the CSA has made to correct the known deficiencies in the current risk rating disclosure regime. Kenmar continue to support the Fund Facts approach to mutual fund disclosure. The CSA's extensive analytical and research work in releasing this consultation paper is duly acknowledged.

Introduction

"Everything Should Be Made as Simple as Possible, But Not Simpler ' - Albert Einstein

The disclosure of risk in FF's is perhaps its greatest value for retail investors. Approximately 12 million Canadians have nearly \$1 trillion of their nest egg savings invested in mutual funds. If the disclosure of risk is well done, the probability of successful outcomes increases. It should be noted that under the prevailing Suitability system, a dealer Representative need only recommend "suitable" funds based on a weak KYC system but the final investment decision rests with the individual investor. "Advisors" do not have a fiduciary obligation to clients but retail investors believe they do. This makes responsible risk disclosure a critical issue for regulators. The current methodology clearly suffers from a number of drawbacks not the least of which is the amount of "flex" and the omission of the principal risks of the fund.

We cannot comment on the rating methodology in isolation given the nature of Fund Facts. Accordingly, we comment on the Consultation holistically and in context. Of course, disclosure is of little value if Fund Facts is not delivered at or before the point of sale. This remains a major drawback of the Fund Facts regime at this time.

We agree that if a risk rating is provided, it should, to the extent possible, be based on one standard risk rating classification methodology rather than fund managers using whatever classification they want. This should in principle allow better comparison between funds .The methodology should be mandated not guidance. Currently, risk ratings using the IFIC methodology use 5 bands. A shift to the proposed 6 band disclosure regime will slice the distribution finer likely resulting in a fair number of funds moving from Medium to Medium to High ratings. This is a positive outcome long term but it may result in many dealer Representatives (aka "advisors") switching clients to lower risk rated funds, including so-called Low volatility funds, in the short term.

While we comment on the specific proposal elements we wish to reiterate our concerns about the use of risk rating scales. What constitutes risk normally will shift over a person's lifetime and can vary widely depending on the investor's time horizon, goals, financial situation, other portfolio investments, age and appetite for risk. In the case of an investor concerned about potential short-term loss, money market funds may rightly be characterized as low risk and long-term Bond funds as higher risk. By the same token, for an investor defining risk as the potential long-term loss of purchasing power (inflation), Growth funds could be considered low risk and money market funds as high risk. This is why we are not supportive of a risk rating per se but if the dispersion of returns is depicted as a variability of returns measure, we are supportive. Subject to space constraints, to portray downside risk we believe it would be meaningful to retail investors to disclose the worst and best 3-month, 1-year, 3-year, 5-year and 10-year returns for a relevant index/ benchmark going back to a defined date perhaps going beyond the most recent 10-year period. While not fund -specific, this disclosure would provide investors with greater context in assessing the general risk of their fund choice / Rep recommendation which our research suggests that is what they most want.

The CSA proposal

The consultation states that the disclosure practices of other jurisdictions were reviewed yet there is no explanation as to why the articulation of the principal risks are not disclosed as is the case in Europe and the U.S. and why a guideline proposed by IOSCO for such articulation is set aside.

The CSA propose to use the 10 year SD based on monthly returns (pre-tax) under the implied assumption of a normal distribution. Commenters are not provided any rationale as to why other risk indicators were dropped from consideration .Returns are calculated net of fees and assume all distributions are re-invested (without payment of tax). The proposal is most applicable to registered accounts where taxation issues do not arise. Loads are not factored into returns. The monthly SD is annualized using the sqrt 12 formula. Ratings are broken down into 6 bands with some rules as how to handle band "breakouts". The presumption and desire is that risk ratings will be stable .The proposals for risk bands and the use of 10-year SD are based on historical facts. The CSA provide that where 10-year data is hard to come by, making the use of indexes necessary to augment limited historical data.

Retail investors and Risk

Our comments to this consultation are based on the primary intended user, the retail investor, of the risk disclosure having the following profile:

- ³⁵ A literacy level equivalent to grade 6
- A sizable proportion of the population whose first language is neither English nor French
- ³⁵ A low level of financial literacy and numeracy
- About 80-85 % of fund purchases involve the participation of a dealer Rep (aka "advisor")
- An average hold period estimated at 6-7 years but possibly as low as 4.5 years for load funds
- An increase in the number of people who grasp the fact that it is <u>the portfolio</u> of mutual funds that really counts long term
- An increase in ownership of mutual fund wraps that purport to match a portfolio of funds to KYC thereby consolidating several FF's into one
- Retirement saving is the primary investment objective
- A rapidly increasing number of people entering the de-accumulation phase of the investing life cycle. Adding complexity to the definition of risk is time. Our brains are programmed to feel the pain of short-term losses. Yet even a 75-year-old may need his portfolio to last an additional 10-15 years or longer. Over such time periods, the risk of incurring a loss over the short term pales in comparison to the risk of not having enough money in the future to maintain an adequate level of purchasing power. Minimum annual RRIF withdrawal rules add to the complexity.
- At Dec. 2011 about 43% of mutual fund assets were in RRSP's per Investor Economics https://www.ific.ca/wp-content/uploads/2013/08/Comparative-Summary-Paper-A-Canada-US-Perspective-November-2012.pdf/1651/. Thus ,taxation of the other 57 % of assets can be a major risk factor for Canadians in failing to meet long term objectives . Such an analysis is beyond the scope of this Comment letter but we raise it to demonstrate that volatility risk is a limited indicator for risk in the way retail investors define risk.

An investors' perception of 'risk' and what the investment industry/regulators portray as 'risk' differ

radically based on our experience with investors especially those filing complaints or unhappy with outcomes or their Reps. In a number of surveys and research reports, respondents more frequently mention "loss of money" as their view of risk i.e. downside risk. Thus they seek a downside risk metric. Other concepts of "risk" that investors typically identify include the investor's account not having enough money at the end of the investment horizon to achieve their life goals, and the investment not performing as well as a bank GIC or a passive index. As is well known, Risk is a word that is not easily definable.

Certainly, in the world of finance, explaining what risk is should be fairly straightforward. In reality, defining risk is a bit like defining obscenity-a person knows it when he sees it. The Merriam-Webster Unabridged Dictionary lists four definitions, and several qualifiers, for risk. They include "the possibility of loss, injury, disadvantage, or destruction," "someone or something that creates or suggests a hazard or adverse chance" and "the product of the amount that may be lost and the probability of losing it." Most individual investors would probably define risk as the chance of seeing their portfolios drop in terms of absolute dollars. If a portfolio has a certain possibility of falling from \$1.00 million to \$800,000, many investors would describe the portfolio's investments as being risky. Notice our usage of "absolute dollars." If the same portfolio appreciates 2% to \$1.02 million, but inflation increases by 3%, the investor's ability to buy goods and services is diminished. She/He incurs a loss in real (post-inflation) dollars, even though he avoided what he/she traditionally thinks as risk, meaning a loss of absolute dollars.

In our experience with retail investors, the word "volatility" is also either not understood or taken to mean extremely risky as in nitroglycerine. These considerations present challenges for the CSA if it relies on quantitative measures of risk, such as standard deviation ('volatility') as a risk disclosure vehicle.

Finance academics and analysts usually identify risk as the volatility associated with the prices and/or returns of investments. However, most retail clients do not think of risk in terms of narrow mathematical terms. To the extent volatility will remain as the basis for risk rating we recommend a stronger definition of volatility be used in FF Viz A fund's volatility is determined using a statistical measure called "standard deviation". Standard deviation measures the amount of variability of returns that has historically occurred relative to the average return. The higher the standard deviation of a fund, the greater the range of returns it has experienced in the past. Other types of risk, both measurable and non-measurable, exist. In addition, just as historical performance may not be indicative of future returns, a fund's historical volatility may not be indicative of its future volatility or better, its replacement with a descriptor that will be better understood and its limitations made more evident. Given that most risk ratings would really be the risk rating of an index rather than the fund, we recommend Variability of returns as a better and safer descriptor.

A retail mutual fund investor faces at least 4 risk components:

- 1. market risk
- 2. product risk (e.g. valuation, T&C's, securities lending, swaps, series risk...)
- 3. governance (cost allocation, front running, conflicts-of- interest, the market timing scandal)
- 4 . dealer Rep risk (conflicted recommendations, incompetent advice, churning, unsuitable recommendations)

The risk of being sold a mutual fund usually includes the use of "advisors", a risk we regard as material. When dealing with financial advisors, especially those whose income depends on sales loads

and trailer commissions, there is the risk that unsuitable investments may be recommended. Advisors may recommend unduly risky funds, promote DSC funds and high MER funds or, encourage excessive switching increase the likelihood that investor returns will be sub-optimal. This is a hazard inherent in the distribution system of the mutual fund industry. The old industry adage – "Mutual funds are sold, not bought" reflects this fact. We therefore believe a strong plain language warning about this conflict-of-interest is important in any discussion of mutual fund risk. It appears that the proposed risk rating methodology is targeted at 1. and may capture 2. and 3. The risks of item 4 are not insignificant and deserve stronger disclosure and prominence in FF.

Accordingly, looking at risk disclosure holistically, we recommend that:

- (a) The Holdings section be renamed to include the words "concentration risk"
- (b) The Risk section be relabeled as simply Variability of Returns [This ties in neatly with the warning with "Mutual funds are not guaranteed, their prices change frequently and past performance may not be repeated"]
- (c) Volatility risk be moved from the performance section to the risk section .The focus testing suggests it should be moved.
- (d) Conflict-of-interest disclosure be moved to trailer commission section and
- (e) That FF be delivered **BEFORE** the sale is consummated.

While we are critical of a risk rating scale as a risk indicator, investors should be aware of return variability for at least five reasons:-

- The wider the swings in a fund's NAV, the harder it is for a retail investor not to behave badly;
- When certain cash flows from selling a security are needed at a specific future date, higher volatility means a greater chance of a shortfall;
- Higher volatility of returns while saving for retirement results in a wider distribution of possible final portfolio values;
- Higher volatility of return when retired gives RRIF withdrawals a larger permanent impact on the portfolio's value;
- ³⁵ Price volatility presents opportunities to buy assets cheaply and sell when overpriced. If the standard deviation acts as a proxy for variability of returns as opposed to a fund risk rating, we think it adds value in making an informed investment decision based on an advisor's recommendation.

Volatility risk rating disclosure is not the whole story

Mutual funds must currently include in the so -called Simplified prospectuses narrative disclosure describing the principal risk factors associated with a fund. In fulfilling this obligation, mutual funds often include detailed disclosures in the MRFP concerning the risks of the individual securities in which they may invest. Fund managers go into such detail for a number of reasons, including the desire to respond to comments on prospectuses by Commission staff and efforts by fund counsel to minimize disclosure liability. As noted by securities regulators, behavioural economists and investor advocates, such detailed legalistic disclosure can obscure a fund's overall risks and deter the reading of the Prospectus. Hence the need for a Fund Facts. We therefore believe that it is important that FF disclosure should focus more on a fund's broad investment objectives, its strategies to reach those objectives, and the portfolio risks accompanying those strategies. Using a holistic approach to risk disclosure would greatly enhance investor understanding, particularly when reinforced by

MRFP/Annual report discussions of the relevant market conditions and general investment strategies and techniques pursued by the fund that materially affected performance.

If the CSA are determined to use a risk rating metric, there is a need to do more than merely describe volatility risk in the risk section. IOSCO's Principle 1 states: "key information should include disclosures that inform the investor of the fundamental benefits, risks....Its risk and reward profile. Risk disclosures should include the material risks for the product. This may include performance risk/volatility, credit risk, liquidity risks and operational risks. In some jurisdictions, a scale may be considered appropriate to identify the overall risk measurement or classification of the product, rather than a list of specific product risks, and this may be accompanied by appropriate narrative explaining how to interpret the scale. This may assist with risk comparisons, although regulators and investors need to be aware of the inherent limitations in such measures. [footnote] Regulators might wish to include supporting information indicating minimum length of holding relative to short term volatility, what types of "targeted investors" the product is being marketed to and what commitment those investors need to make;..." While the focus group testing done by the CSA indicated that investors had difficulty understanding the principal risks that were described in the section, we are of the firm conviction that the principal risks need to be disclosed on FF; a way to present this info needs to be found in a manner that would alert investors to the other risks involved with fund ownership. To tell them to go to the Simplified Prospectus is simply not adequate. NOTE: The IOSCO document (see Appendix) on page 20 states "However focus groups alone may not be the most effective way to test the usability of a document or to learn how well an individual really understands what is written."

Kenmar remains constructively critical of any requirement that mutual funds disclose a single, standardized, risk rating. We believe this approach is fundamentally flawed. It erroneously assumes that a single, optimal yardstick of investment risk exists; ignores that risk is multifaceted, necessarily having different meanings for different investors; and poses the significant danger that retail investors-neither understanding the limitations of a CSA-sanctioned, all-purpose risk measure nor accurately assessing its relevance and appropriateness to their particular circumstances and investment objectives-nonetheless will rely on it to their detriment.

We argue that any disclosure seeking to address these issues would have to consider that: (1) risk ratings will likely be interpreted as predictive and strongly caution that future results may vary substantially from what is predicted; (2) volatility risk ratings only measure certain types of risk, which may not be relevant in the case of any particular retail investors' circumstances; (3) risk ratings are relatively new, untested and different from established ratings such as bond credit ratings; and (4) risk ratings may become outdated as valuations /market conditions change and, accordingly, investors should not rely on the ratings' future applicability to their fund. We add that given the choice of word descriptors, investors and registered representatives may confuse these with similar sounding words on NAAF/KYC documents used for critical suitability determinations. Risk classification should NOT equate with suitability – medium risk tolerance person does not mean that a medium (or less risk) fund is ipso facto suitable. Product risk does not equate with KYC risk tolerance. Regulator suitability guidelines should avoid referring to FF risk ratings as they have complicated compliance exams and client complaint investigations. For this reason we suggest using numbers rather than text for risk ratings.

Index augmentation significantly weakens the value of the risk metric

The consultation paper does not provide any data on fund longevity. This is critical information given that the ratings are based on 10-year data. We therefore looked up a random sample of 200 funds on globeinvestor.com and found that only 54 or 27 % of funds had an inception date of 10-year s or more. SPIVA results (see APPENDIX reference) for 5 years also suggests that after even 5 years, a high proportion of funds will need index augmentation. Morningstar Canada kindly provided us some information from their database. Of a total universe of 7678 funds including multiple series of the same fund, just 1607 (21 %) funds with at least 3 years of history had 10 years of data. Even among core funds, only 41.4% have 10 years or more of history (1203/2904).

Assuming this is representative, it would appear that a majority of funds would require to be rated using indices rather than fund-specific SD data. If this is correct, it dramatically downgrades, in our mind, the value of fund risk ratings. A number of industry observers AND industry participants argue that the use of proxies when you do not have a 10 year record leads to misleading results when the fund has a high Active Share or the manager simply does not follow index sector allocations.

Another point raised by a number of analysts and advocates is that the CSA consultation does not provide guidance on how the indices are to be deployed. It seems unreasonable to merge monthly index return data which is based on an index that is costless and frictionless with real after cost return data experienced by the fund.

The reference indexes, according to the CSA proposal, will need to have returns that are highly correlated with the fund, a high proportion of similar securities and allocations by asset class, and a similar historical risk profile. As the consultation paper acknowledges, the choice of a reference index becomes more complicated for funds that invest in more than one asset class, such as Balanced funds. For these and other multi-class mandates, it would appear there would still be some considerable scope for fund companies to make judgment calls. Use of the IFIC volatility risk scale classification methodology which also allowed considerable wiggle room did lead to a number of significant risk mis-ratings. [Always *take a second look at mutual fund risk ratings* http://www.fundlibrary.com/features/columns/page.asp?id=13725]

Bond fund risk ratings present a special challenge

Bond funds are typically 40 % of a portfolio; even higher for seniors/ retirees. Some investor advocates argue that 'a risk rating that represents a judgment of how a Bond fund will react to changes in various market conditions would be interpreted by retail investors as predictive of fund performance or just plain misleading. Unlike bond and Bond-fund credit ratings, which reflect credit risk, Bond-fund risk ratings in the US. reflect several types of risk. Interest rate, currency and prepayment risks are principal examples. The CSA proposal would see Canadian Bond fund risk ratings based solely on past volatility. The main risk with bonds and Bond mutual funds is interest rate risk.

Interest-rate risk - the risk that a bond's or bond fund's share price falls when interest rates rise - can be very painful if you are invested in a long-term bond fund when rates rise significantly, as they did in 1994. We therefore are concerned that Bond fund risk ratings based on SD would put the most vulnerable of investors, senior retail fund investors, in harms way.

Unlike a bond, a Bond fund is actively-managed and thus there is a chance that volatility ratings will become "stale" and fees impact returns and duration. Significantly, volatility ratings of Bond funds are

difficult to use by retail investors; they are not institutional investors who are in a position to understand the basis of, and limitations inherent of such ratings. Less sophisticated investors are likely to be misled, and to take a Bond fund volatility risk rating as a depiction of the risk most significant to them, when such in fact is not the case. To further complicate matters, there are also innumerable kinds of risks, unrelated to the investor's own circumstances, that can affect the performance of a Bond fund. These include, for example, credit risks; interest rate risks; liquidity risks; currency risks (for foreign bonds); political risks; risks from call or pre-payment provisions; risks from the use of leverage, options and derivatives; risks arising from over concentration (lack of diversification); and operational matters.

It is reasonably predictable that Bond fund investors will assume, from their experience in other contexts, that an "aaa" risk rating means "superior," and make their investment decisions accordingly. Indeed, in the context of credit ratings, a triple-A rating for a bond really does mean "superior." It would only be natural, therefore, for investors to draw the same conclusion with respect to Bond fund risk ratings. A basic premise underlying bond investors is that have a strong sensitivity regarding the current values of their fixed income investments to changing long -term interest rate trends .A low risk rating for a Bond fund at a time of record low interest rates could be misleading to unsophisticated retail investors in our view. If *Variability of returns* nomenclature is used we think a more useful picture is portrayed for investors.

Different series need to be rated-fees count, decrease returns and increase risk of loss

Risk also ties into fees not just volatility. Nobel Laureate William F. Sharpe's paper 'The Arithmetic of Active Management' http://www.stanford.edu/~wfsharpe/art/active/active.htm articulates his reasoning of why the average passively -managed dollar *must outperform* the average -actively managed dollar. This concept can be graphically depicted. Using the assumption of a Normally-distributed *after-cost* collective investment experience for active managers as a benchmarked and taking out costs that constitute leakages to overall performance causing reduced returns, the Normal distribution shifts left due to the impact of costs, thus decreasing investor returns "on average".



After Costs, Low Cost Managers Will Outperform (on average)

In this illustration, a market return might be the high point of the chart, but actual investor experience will be uncertain. However, passive (market-tracking) products have costs and therefore will have a return that will be below the market return by the amount of those costs. The illustration then assumes actively-managed mutual fund costs are 1% higher in aggregate, causing a further 1% shift that one

might expect over time. The shaded area of the normal distribution to the left of the average return of the market returns represents the actively -managed funds that underperform before considering costs. After costs, the entire distribution shifts to the left. If it shifts enough, the investor paying high fees will have a higher risk of a loss due solely to fund fees. We therefore argue that different series of a fund (D,F, I et al) because of significant fee differentials should be separately rated. (thanks to John DeGoey for the graphic and example) The same logic applies to currency - hedged funds.

The Inherent Flaws in Fund Risk Ratings Cannot Be Readily Cured Through Additional Disclosure or Other Requirements

By their very nature, fund risk ratings are designed (and will be marketed as such) an inviting "short-cut" for investors. This is why the ratings process, at its end point, is reduced to some shorthand designation e.g., a scale consisting of textual word/ phrase. Because of the numerous troublesome issues that this process poses, we do not believe that any accompanying disclosure or other substantive requirements will suffice to protect investors. The extent of the required disclosure in our judgment would be formidable. More likely, it would take the form of lengthy "boilerplate"-the kind most likely to be ignored while investors focus solely on the shorthand of the assigned rating itself. This is why we strongly urge the CSA to add the principal risks to the disclosure and describe volatility differently.

Risk ratings, by their very nature, are tempting but potentially harmful shortcuts. Without understanding the nature and limitations of such ratings, retail investors will rely upon them heavily-in particular, for the perceived predictions they make about a fund's future performance.

The Methodology of Assigning Fund Risk Ratings is Unproven, Raising Concerns About the Efficacy of the Ratings

The proposed methodology in assigning mutual fund risk ratings are a relatively recent invention and novel at best. To our knowledge these methodologies have not been subject to any significant testing. Because of the lack of marketplace experience with fund risk ratings, there is no basis for confidence about the robustness of the ratings. Ratings based—single parameter such as standard deviation—volatility are untested, and it is not clear that they will be sufficient to protect investors when market conditions change. We note that the U.S. SEC decided, after extensive consultation, not to use numeric or alpha symbols to depict mutual fund risk. Instead, they require the principal risks to be enumerated in the Fund Summary Document. In India, the securities regulator has recently decided on a 3 point colour-coded scale. It has been critiqued by some in the industry, academia and media as potentially misleading. In Europe the synthetic indicator (volatility) is supplemented by (a) a narrative explanation of the indicator and its main limitations (b) a narrative explanation of risks which are materially relevant to the UCITS and which are not adequately captured by the synthetic indicator. Right now, Fund Facts only partially does (a) or does not do (b). We recommend that the IOSCO guidance be followed.

Will investors Unduly Rely on Risk Ratings to the Exclusion of Other Risk Information?

Kenmar is concerned that investors are likely to place undue reliance on fund risk ratings particularly if they are permitted in supplemental marketing /sales literature and ads. Investors are likely to regard the rating as the most relevant measure of a fund's risk, eliminating any incentive to read the Simplified Prospectus discussion of the fund's investment risks, which might include information far more relevant to an investment decision. As such, the use of fund risk ratings could frustrate the ongoing efforts of the CSA and the industry to equip investors with understandable and meaningful information on risk at the point of sale and investment decision.

Kenmar's concerns in this regard are based on experience. The propensity of investors to rely on ratings

has been demonstrated by the almost blind faith that many retail investors place in performance rankings, such as those compiled by Morningstar and others. Numerous studies show that the bulk of new money goes into funds that received five stars by Morningstar, despite the fact that lower ranked mutual funds would be more appropriate for many investors. It is also quite likely that investors will think of the risk rating as predictive not realizing that is not the basis for the calculation of the rating. In fact, the CSA make it clear that a goal of the rating system is that the rating be stable and not reflect current valuations or prevailing market or economic conditions.

Our experience suggests that Fund Risk Ratings Falsely will Imply That "Risk" and Short-Term Volatility are Equivalent Concepts

For most retail investors short-term volatility neither is, nor should be, the most important risk factor in deciding which fund to purchase. Based on numerous investor surveys, the majority of investors tend to view risk from a more long-term perspective. Surveys likewise confirm that most investors tend to buy funds for the longer-term, not as short-term trading vehicles. The rational concern is whether the fund will provide an adequate rate of return over the investor's time horizon, not whether, in the process, short-term returns will fluctuate around some postulated "mean" (e.g., the fund's own historical rate of return or some market index). An investor with a 6 or 8 year time horizon is obviously better off with a fund that has an annualized return of 7%, although experiencing a fair amount of short-term volatility, than a fund that returns 3% per year with little deviation from that figure. Because fund risk ratings may be perceived as short-term volatility, however, the second of the two funds in the foregoing example presumably would receive the better (i.e., more favorable) risk rating.

While such funds may be the best choice for an investor with a short time horizon who does not wish to risk selling fund shares in a down market, this is often precisely the wrong choice for many investors, particularly those who are saving for retirement, university education, or other long-term goals. Moreover, by implicitly or unconsciously encouraging retail investors to purchase funds with medium or low fund risk ratings, the very real possibility exists that investors will fail to diversify the categories of mutual funds in their investment portfolios. The lack of such asset class diversification will expose these investors to greater risks over the long haul.

Risk ratings should not be used in marketing materials.

The consultation paper is silent as to how the risk rating can be used. Disclosure of fund risk ratings in sales literature could be particularly misleading for individuals who make their own investment decisions through defined contribution plans. Many such fund investors will not appreciate that, in the context of reaching their long-term investment goals, the least risky appearing investments may be the most risky for them once their appropriate time horizons are considered. If the CSA does not prohibit marketing of risk ratings they could and likely would be included in newspaper ads, radio and television ads and any other mass media used to market funds. Absent any limitation by the CSA on the use of such risk ratings, they are likely to become ubiquitous and, as such, exert a powerful -and, in our judgment, harmful -influence over retail investors' investment decisions.

Fund names should not be misleading

Research shows that Fund names can mislead retail investors. Any amendment to regulations should ensure that companies must use names that represent the strategies of the fund. If a fund uses the words *low volatility* in its name, it should match the risk rating the company has calculated as representative of the fund.

Our Comments: Issues for Comment on the Notice and Request for Comment

1. As a threshold question, should the CSA proceed with (i) mandating the Proposed Methodology or (ii) adopting the Proposed Methodology only as guidance for fund managers to identify the mutual fund's risk level on the prescribed scale in the Fund Facts? Are there other means of achieving the same objective than by mandating the Proposed Methodology, or by adopting it only as guidance? We request feedback from investment fund managers and dealers on what a reasonable transition period would be for this.

Kenmar agree that the risk rating methodology needs to be standardized and mandated by a regulator or some independent third party. We have all seen the great variability in ratings in using IFIC's volatility risk methodology and other approaches. There may be a differing methodology required for structured funds, such as Target Date funds, where past SD data is not relevant. Please note also that retired investors are less likely to reinvest distributions as the distributions are needed to finance living expenses which is not the basis for the methodology. As to the transition period ,under MFDA MR-0069 (Suitability Guidelines), immediately following the implementation of this methodology, with the resultant increase in risk classification, MFDA-licensed dealer Representatives will be forced to recommend modifying investor portfolios unless a reasonable transition period is provided .

2. We seek feedback on whether the Proposed Methodology could be used in similar documents to Fund Facts for other types of publicly-offered investment funds, particularly ETFs. For ETFs, what, if any, adjustments would we need to make to the Proposed Methodology? For instance should standard deviation be calculated with returns based on market price or net asset value per unit?

It may be that the proposed methodology may be useful in the ETF and Closed End Fund world. We caution however that it may be premature to extend the methodology until it is more established and proven. Because investors are interested in actual dollars, it makes sense to base risk rating on market value which is the real world experience .We assume that money market funds, funds that invest in convertible bonds, funds that have an exemption to short sell will be required to be rated but LSIF's will not need to be rated. We urge securities regulators to work collaboratively with insurance industry regulators towards having Segregated funds and similar products use this methodology.

3. We seek feedback on whether you agree or disagree with our perspective of the benefits of having a standard methodology, as well as whether you agree or disagree with our perspective on the cost of implementing the Proposed Methodology.

Standardization is the way to go but clearly data limitations make this difficult. Further, the fact that that the rating methodology allows fund managers to choose a benchmark leaves the system open to a certain amount of manipulation. Further, the short life spans of funds will in effect make most fund risk ratings more of an index volatility measure than a fund-specific one.

Kenmar believe that any single measure of risk is insufficient for investors and Reps to adequately assess the risk of an investment. While SD likely represents the most comparable measure, it does not provide investors with an indication of risk of capital loss, their main concern. The addition of disclosure of risk of capital loss would improve relevance and context for investors in understanding the risk associated with their investment decision. Using a prescribed benchmark to depict risk of

capital loss would provide useful information to investors while addressing the biases inherent with shorter investment periods and different inception dates across funds.

4. We do not currently propose to allow fund managers discretion to override the quantitative calculation for risk classification purposes. Do you agree with this approach? Should we allow discretion for fund managers to move their risk classification higher only?

Once overrides are allowed, problems will arise and fund comparability impaired. If truly extraordinary circumstances prevail, some explanatory text should be allowed.

Issues for Comment on the Proposed Methodology

5. Keeping the criteria outlined in the introduction above in mind, would you recommend other risk indicators? If yes, please explain and supplement your recommendations with data/analysis wherever possible.

There are other good risk indicators as articulated in the appended research papers but they may be more costly to implement and will be harder for retail investors to understand. If a risk rating must be provided, simplicity has value as long as it does not mislead or cause harm. However, to the extent the CSA considered them, the rationale for not using them should be revealed.

6. We believe that standard deviation can be applied to a range of fund types (asset class exposures, fund structures, manager strategies, etc.). Keeping the criteria outlined in the introduction above in mind, would you recommend a different Volatility Risk measure for any specific fund products? Please supplement your recommendations with data/analysis wherever possible.

We have experienced a fair number of complaints with T class funds and expect the weak risk disclosure was the root cause. Such funds due to their nature make volatility an unreliable measure; as well, the use of ROC adds another dimension of complexity and risk (e.g. taxation). Currency hedged funds complicate return distribution profile and fund behaviour/volatility thus may need some other way to describe risk. In any event, a separate calculation is required for the hedged and unhedged series of the fund. We believe Life Cycle funds may need a different approach as the risk level changes by design over time. Certain contractual terms (e.g. major event risk) also add to risk of these funds. Tactical asset allocation (TAA) funds may present a challenge for the proposed risk rating system since the underlying statistical distribution is constantly changing, some quite wildly, due to management interventions that are not due to chance. In TAA, the manager adjusts asset allocation in accordance to the markets in which they invest. Investors who utilize the tactical asset allocation strategy generally want to hedge risk in a volatile market. We would need more time and much research to be in a position to recommend on any risk measures for such complex funds.

7. We understand that it is industry practice (for investment fund managers and third party data providers) to use monthly returns to calculate standard deviation. Keeping the criteria outlined in the introduction above in mind, would you suggest that an alternative frequency be used? Please specifically state how a different frequency would improve fund risk disclosure and be of benefit to investors. Please supplement your recommendations with data/analysis wherever possible.

Without a comprehensive statistical analysis it is hard to say if weekly returns would be better. Perhaps the CSA might try some back testing or fund additional research. It appears that internationally, monthly data is most commonly used.

8. Keeping the criteria outlined in the introduction above in mind, should we consider a different time period than the proposed 10 year period as the basis for risk rating disclosure? Please explain your

reasoning and supplement your recommendations with data/analysis wherever possible.

Without a comprehensive statistical analysis it is hard to say if a longer period would be better. We expect the many other assumptions about the distribution of returns make the tracking time period issue a second order consideration. Perhaps the CSA should check with academia / actuaries. Indeed, we hope the CSA will encourage actuaries and forensic accountants to provide comments. Because unsuitable investments are usually associated with incorrect product risk assessment, OBSI may be able to provide some deep insight into failures in the disclosure system. From our perspective a 10-year period would be insufficient for measuring risk of loss as opposed to SD. There are extended periods of time where capital markets have delivered strong performance with limited downside.

9. Keeping the criteria outlined in the introduction above in mind, should we consider an alternative approach to the calculation by series/class? Please supplement your recommendations with data/analysis wherever possible.

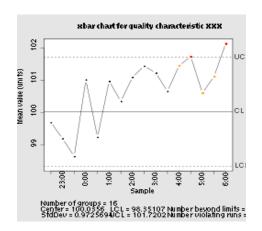
We leave this to industry participants to opine upon.

10. Keeping the criteria outlined in the introduction above in mind, do you agree with the criteria we have proposed for the use of a reference index for funds that do not have sufficient historical performance data? Are there any other factors we should take into account when selecting a reference index? Please supplement your recommendations with data/analysis wherever possible.

The use of indices to make up experience shortfalls is of course controversial. The criteria for selecting an index appear fulsome. Kenmar recommend that the reference index not be inconsistent with the broad-based market index chosen for the MRFP. Given the sorry stats on fund lives, many, if not most, funds will end up being rated on the basis of passive indexes rather than actual data. The use of index return data would have to be adjusted for fund fees before merging with actual fund-specific returns which have been adjusted for fees.

- 11. Keeping the criteria outlined in the introduction above in mind,
- i. Do you agree with the proposed number of risk bands, the risk band break-points, and nomenclature used for risk band categories?
- ii. Do the proposed break points allow for sufficient distinction between funds with varying asset class exposures/risk factors? If not, please propose an alternative, and indicate why your proposal would be more meaningful to investors. Please supplement your recommendations with data/analysis wherever possible.

Quality control engineers make use of statistical control charts. Typically control charts are used for time-series data. If analysis of the control chart indicates that the process (the risk distribution) is currently under control (i.e., is stable, with variation only coming from sources common to the process), then no corrections or changes to risk ratings are needed. In many cases the choice of control limits is plus/ minus 3 Sigma but can go as high as 6 Sigma. If the chart indicates that the monitored process is not in a state of statistical control, analysis of the chart can help determine the sources of variation, and a determination made if the process has changed fundamentally, thus requiring a change in risk rating.



As noted, we are critical of the use of a scale to depict fund risk. To the extent that the CSA will proceed anyways we believe the CSA has found a good balance in setting breakpoints and the number of categories. The nomenclature is of concern in that fund dealers may use it in complaint cases to defend their choice of fund recommendation. The stability requirement for the rating could cause buying at market peaks resulting in short and intermediate term losses for investors. In the case of Japan funds, it could lead to long term losses.

As noted, we are concerned about nomenclature (change to Variability of returns) and recommend a numerical scale and heading change. The issue with Balanced funds/ wraps/LCF funds with widely varying permissible asset ranges is serious. Indexes may not be able to capture the effect accurately. Since Balanced funds and wrap accounts/funds are so popular, a large number of Canadians could be exposed to "Disclosure risk". We assume that fundcos would be protected under Safe harbour provisions if the calculations were done in good faith and in the manner disclosed in the Simplified prospectus. Conversely, retail investors would not have such protection in the event risk mis-ratings are misinterpreted and lead to undue investor losses.

12. Do you agree with the proposed process for monitoring risk ratings? Keeping the criteria outlined in the introduction above in mind, would you propose a different set of parameters or different frequency for monitoring risk rating changes? If yes, please explain your reasoning. Please supplement your recommendations with data/analysis wherever possible.

The process appears reasonable given that the purpose of the monitoring is to promptly alert investors of a material change in a fund's risk rating.

13. Is a 10 year record retention period too long? If yes, what period would you suggest instead and why?

Typically, record retention periods are 7 years. Given today's modern IT systems and low cost storage we do not see a huge burden involved in using a 10 year retention period. We leave this to the lawyers, risk managers and regulators to determine.

14. Please comment on any transition issues that you think might arise as a result of risk classification changes that are likely to occur upon the initial application of the Proposed Methodology. How would fund managers and dealers propose to minimize the impact of these issues?

As we have noted, the Medium Risk category will likely involve the most churning for accounts

employing stand-alone funds. In some cases early redemption penalties may be incurred to satisfy KYC/Suitability compliance. Please note however this comment in the appended (referenced) Investor Economics research report:"...This period of significant development also witnessed the introduction of a number of competing investment and deposit-based products, as well as new fund-based products, such as mutual fund wraps, which had an impact on the growth of traditional, standalone mutual funds. Twenty years ago, stand-alone investment funds accounted for all fee-based assets held by retail investors; the share held by stand-alone funds has since declined to less than one half...". IE report that about 80 % of new fund sales are currently coming from wrap accounts. We leave a response to this question to industry participants to assess. [According to http://www.theglobeandmail.com/globe-investor/investment-ideas/mutual-funds-diy-investors-can-get-behind/article15689088/ analysis firm Investor Economics says that just under 10 per cent of the \$275-billion held in online brokerage accounts is invested in mutual funds, compared to about 7 per cent for ETFs i.e. they are DIY investors with about \$27 billion in mutfund assets]

Other observations, questions and thoughts:

- The analysis provided makes sense for a passive index like the S&P 500 but is there evidence that the SD is well behaved for actively managed mutual funds? Funds behave differently than indices they are impacted by such issues as unanticipated changes in portfolio management personnel, fund mergers, fee waivers, changes in sales and redemption patterns that affect portfolio decisions, competitive pressures, management fee changes, governance risks and policy changes in the CSA, Finance Department (e.g. adding the HST), the CRA or various provincial governments.
- Is there supporting data that assuming monthly returns are Gaussian distributed and uni-modal is reasonable or if not, is the error small? See S&P 500 histogram in the Appendix. The Cauchy distribution looks more real world but analysis becomes much more complex.
- 35 Is the sqrt 12 formula accurate enough for a 10 year interval? (we understand it is an approximate formula)
- Currency hedged funds complicate the risk-return distribution profile and fund behaviour/volatility-will the CSA definitively require a separate rating?
- Can it be assumed that the index used for risk rating is identical to the benchmark used for performance disclosure for the fund?
- Will regulation require manager to manage the fund in accordance with its published risk rating? Enforceable?
- Fund managers too often drift from their stated investment objectives, policies and styles.
- 35 Should the rule provide a clause that warns against matching the risk rating words to NAAF/ KYC terminology?
- Is there a chance that the scale could cause investors not to re-balance fund portfolios due to the perceived "stability" of the risk rating?
- What calculation rules will govern Fund mergers?
- Funds permitted to Short sell (up to 10% of assets) may distort a fund's statistical profile.
- Will the IRC provide oversight over risk rating disclosure? If not the IRC, who?
- An investor's time horizon impacts the interpretation of risk -it is estimated that the average hold period is 6-7 years, somewhat short of the 10 years generally accepted as long-term.
- Will Segregated funds be required to use this scale methodology? If not, significant regulatory arbitrage issues may come into play.

Summary and Conclusion

The CSA has adopted a "Plain Language Disclosure" approach which we fully endorse. It stresses the importance of presenting risk information in a clear and explanative format. The Fund Facts already provides a reasonable basis for a retail investor to assess the risk of investing in the fund. Fund Facts requires fundcos to include a ten year annual return bar graph which speaks to variability, together with a presentation of the fund's average annual return. It also provides the worst 3 month return over the past 10 years, concentration risk (albeit indirectly) and a statement saying how many times the fund lost money over 10 years. FF's also provides a mild warning on advisor conflict-of-interest risk. Adding volatility risk and a reference to the Prospectus round out the disclosure. If the principal risks of a fund were added, we believe FF will do a reasonable job of prompting questions regarding the riskiness of the fund

Our research and experience is that investors express significantly greater confidence in and a stronger preference for narrative and graphic presentation of risk information as compared to any of the standardized measurements. Those investors who have previous experience in using such measurements prefer narrative and graphic presentations of risk information. Those investors (the vast majority) who have no prior familiarity with standard deviation (or Beta or duration), however, seem to have unjustified confidence in their ability to use these measurements effectively -a fact that confirms our conviction that the most vulnerable investors will unduly rely on risk ratings without fully understanding their meaning, limitations or how to use them in portfolio construction.

While investors seeking to hold only one fund would be likely to prefer a lower-rated fund, in a larger diversified portfolio, many investors may want to hold a higher risk-rated fund depending on correlations and other factors. For example, there are good reasons -diversification is one, hedging against inflation another -that some investors may want to have a small stake in a Gold fund, which traditionally carries a High risk rating. This is why we have suggested the labeling of the risk rating disclosure as Variability of Returns. We think this will also reduce problems in compliance, investor complaint investigations and CSA/OSC enforcement.

And of course, we urge the CSA to make POS delivery mandatory as receiving a FF two days or more after purchase defeats the whole idea of disclosure as an investor protection tool.

Many of the issues discussed herein arise because the advice industry does not operate on a Best interest basis. If it did, the pressure to develop elaborate and costly disclosure regimes would be diminished.

We hope this Comment letter proves useful to the CSA in its deliberations.

Do not hesitate to contact us if there are any questions regarding our submission.

If the CSA establish a Roundtable to discuss the issues, our entire team will be glad to support this. Kenmar strongly supports the CSA in making Fund Facts a world class document.

Permission is granted for public posting.

Sincerely,

Ken Kivenko P.Eng. President, Kenmar Associates

APPENDIX: Related research and referenced papers

Backgrounders

Modernization of investment fund product regulation (Phase 2)

http://www.osc.gov.on.ca/en/SecuritiesLaw csa 20130327 81-102 rfc-proposed-amendments.htm

CSA – Implementation of Stage 2 of Point of Sale Disclosure for Mutual Funds – Delivery of Fund Facts – Notice of Amendments to NI 81-101 Mutual Fund Prospectus Disclosure, Form 81-101F3 Contents of Fund Facts Document, Companion Policy 81-101CP to National Instrument 81-101 Mutual Fund Prospectus Disclosure and Consequential Amendments http://www.osc.gov.on.ca/documents/en/Securities-Category8/ni 20130613 81-101 implementation-

Previous Kenmar Associates FF submission

http://www.lautorite.qc.ca/files/pdf/consultations/anterieures/valeurs-mobilieres/81-101/kenmarassociates.pdf

state-2-pos.pdf This document contains the version of FF upon which we are commenting.

FAIR-Canada-submission-re-Implementation-of-Stage-2-of-POS-Discl-for-MFs

http://faircanada.ca/wp-content/uploads/2011/01/111110-FAIR-Canada-submission-re-Implementation-of-Stage-2-of-POS-Discl-for-MFs.pdf

IFI Ccomment letter re Risk disclosure Methodology

https://www.ific.ca/wp-content/uploads/2013/09/Submission-to-CSA-POS-Working-Group-CESR-Risk-Disclosure-Methodology-February-26-2010.pdf/5014/

NI 81-101 - CSA Notice and Request for Comment: Implementation of Stage 2 of the Point of Sale Disclosure for Mutual Funds - The Investor Advisory Panel Letter of September 6, 2012 http://www.osc.gov.on.ca/documents/en/Securities-Category8-Comments/com_20120906_81-101_iap.pdf

IFIC comment letter re Volatility risk disclosure methodology

https://www.ific.ca/wp-content/uploads/2013/09/Submission-to-CSA-POS-Working-Group-CESR-Risk-Disclosure-Methodology-February-26-2010.pdf/5014/

CSA Fund Facts vs IOSCO standard (Kenmar 2011)

http://faircanada.ca/wp-content/uploads/2011/09/SIPA-research-Fund-Facts-vs-IOSCO-standards.pdf *IOSCO Principles on Point of Sale Disclosure Final Report 01022011* http://www.investorpos.com/documents/IOSCO%20Principles%20on%20Point%20of%20Sale

%20Disclosure%20Final%20Report%2001022011.pdf

Hong Kong regulator disclosure rules

http://www.hkifa.org.hk/upload/Documents/Retail-Funds/Recommended-

Practices/RDB Apr0609 final.pdf

"You should not invest unless the intermediary who sells it to you has advised you that it is suitable for you and explained how it is consistent with your investment objectives."

An example of an investor brochure to explain use of Fund Facts

http://ec.europa.eu/internal_market/investment/docs/other_docs/prospectus/financial-information-leaflet-verz_en.pdf See also **Fund Facts: Interactive sample | Infographics** | Investor Education Fund

http://www.getsmarteraboutmoney.ca/en/tools_and_calculators/infographics/Pages/Fund-Facts-Interactive-sample.aspx?

intcmpn=Related+Resources&intsrc=Money+2.0&intpg=fund+facts+a+tool+to+help+you+choose+the +mutual+fund+thats+right+for+you&intcntnt=GetSmarterAboutMoney#.Uqx3xX-9KSM and Fund Facts: A tool to help you choose the mutual fund that's right for you | GetSmarterAboutMoney.ca http://blog.getsmarteraboutmoney.ca/fund-facts-a-tool-to-help-you-choose-the-mutual-fund-thats-right-for-you

Mutual Fund Cost of Ownership Investor Economics

https://www.ific.ca/wp-content/uploads/2013/08/Canadian-Study-Mutual-Fund-MERs-and-Cost-to-Customer-in-Canada-September-2012.pdf/1655/ " In the case of mutual fund holders who pay either a one-time sales commission at the time of purchase of front-end load mutual fund units or a one-time deferred sales charge on the redemption of back-end load mutual fund units, we have conservatively assumed an average holding period of 4.5 years..." and "Reflecting the growing importance of pre-assembled solutions, fund wraps have captured nearly 80 cents of each dollar flowing into the mutual funds industry between 2007 and 2011. **Figure 30** monitors the growing importance of fund wraps to the fund industry's book of business..."

MFDA Suitability Guidelines MR-0069

http://www.mfda.ca/regulation/notices/MR-0069.pdf

Investment risk and financial advice

https://www.vanguard.co.uk/documents/adv/literature/investor-risk-profiling.pdf

Morningstar Rating For Funds Fact Sheet

 $\frac{http://corporate.morningstar.com/CA/documents/MethodologyDocuments/FactSheets/MorningstarRatingForFunds_FactSheet.pdf$

Mutual fund risk ratings | Depth Dynamics

http://blog.moneymanagedproperly.com/?p=3129 CFA Andrew Teasdale believes a lot of relevant points with respect to risk are intrinsically Best interest issues - i.e. wider suitability issues. He thinks that the OSC/CSA consultation needed to clearly define the process that the registered representative and the client are going through at the point of sale with respect to suitability and the relevance of the fund selection and hence the fund risk profile with respect to that decision. Only by

clearly defining the parameters of the process he argues can you define the risk parameters - it is like an equation where you cannot determine the output without the relevant inputs and relationships. He poses the question: *Is it both the fund and the asset allocation that is being selected or is it just the fund to fit an asset allocation profile already determined*, because the risk dimension in each of these two options is vastly different? In a process where the asset allocation has already been defined with respect to a richer set of risk parameters the POS risk disclosure can accommodate a more one dimensional representation of risk.

Per Teasdale "I suspect the consultation will not address this unfortunately. This dichotomy lies at the heart of the weakness of the current transaction process where not only a leap of faith but a miracle is required to reach a "suitable" outcome reliant on minimum standards. "If the KYC and suitability process is more sophisticated with greater advisor responsibility for the decision, then a much simpler stat (as noted) can be provided in the fund disclosure documents.

Fund Facts a good start, but risk rating & suitability get thumbs-down « The Wealth Steward http://thewealthsteward.com/2011/07/fund-facts-a-good-start-but-risk-rating-suitability-get-thumbs-down/

Kenmar Associates Commentary: IFIC risk classification Methodology Task force Report (Kenmar), Unpublished, July 2011 -available upon requese kenkiv@gmail.com

Fees impact Bond fund risk & return « The Wealth Steward

http://thewealthsteward.com/2010/08/fees-impact-bond-risk-return/

"....Two observations. First, the MER reduces the yield-to-maturity by slightly more than the stated level. This is due to the compounding impact of fund fees, which are typically charged daily and paid monthly. Second, fees also nudge duration up because they increase the length of time before the purchase price of the bond is recouped. In other words, fees slightly increase duration risk while also slicing into returns. The result is a double-whammy impact on our risk-return ratio....".

About rating methods

Developing a risk -rating methodology (UK)

http://www.cass.city.ac.uk/__data/assets/pdf_file/0017/32525/risk-rating-comp.pdf . It looks like the standard deviation is one way to depict risk.

CESR 10-673 Guidelines KID SRRI methodology for publication

http://www.esma.europa.eu/system/files/10_673.pdf

Morningstar rating of mutual funds

 $\frac{http://corporate.morningstar.com/CA/documents/MethodologyDocuments/FactSheets/MorningstarRatingForFunds_FactSheet.pdf}{}$

Improving Mutual Fund Risk Disclosure (ICI Perspective, V1N2, November 1995) http://www.ici.org/pdf/per01-02.pdf ICI is the investment fund industry lobbyist in the U.S.

Submission by the Society of Actuaries in Ireland: Communicating Investment risk

https://web.actuaries.ie/sites/default/files/event/2011/03/Communicating%20Investment%20Risk%201.pdf

Mutual fund risk rating methodology: FundScope

 $\underline{http://www.fundscope.ca/methodfunds.aspx}$

Highlights of Fundata FundGrade rating system

http://www.fundata.com/ProductsServices/FundGrade.aspx

How Funds are rated - Value Research Online

http://www.valueresearchonline.com/fundrating.asp

S&P'capitaliq's mutual fund risk rating methodology

https://www.capitaliq.com/media/172902-SPCIQ MutualFundRankingMethodology.pdf

Moody's updates Bond fund ratings based on revised methodology

https://www.moodys.com/research/Moodys-updates-bond-fund-ratings-based-on-revised-methodology--PR 242025

The primary objectives of Moody's revised bond fund rating methodology are:

(1) To define more clearly the scope of Bond fund ratings as primarily addressing the credit quality of the fund's underlying assets; (2) To measure more systematically and objectively portfolio credit quality, by using the portfolio's weighted average life (WAL) as a the key duration benchmark for measuring the portfolio's expected credit loss profile; and (3) To differentiate more clearly Bond fund ratings from the credit ratings of long-term obligations, through the use of a distinct set of rating symbols and updated rating definitions.

REVISED SYMBOLS AND DEFINITIONS Introduced as part of the revised rating methodology are the following revised symbols and definitions that are unique to bond funds:

Aaa-bf - Bond Funds rated Aaa-bf generally hold assets judged to be of the highest credit quality.

Aa-bf - Bond Funds rated Aa-bf generally hold assets judged to be of high credit quality.

A-bf - Bond Funds rated A-bf generally hold assets considered upper-medium credit grade.

Baa-bf - Bond funds rated Baa-bf generally hold assets considered medium credit grade.

Ba-bf - Bond funds rated Ba-bf generally hold assets judged to have speculative elements.

B-bf - Bond funds rated B-bf generally hold assets considered to be speculative.

Caa-bf - Bond funds rated Caa-bf generally hold assets judged to be of poor standing.

Ca-bf - Bond funds rated Ca-bf generally hold assets that are highly speculative and that are likely in, or very near, default, with some prospect of recovery of principal and interest.

C-bf - Bond funds rated C-bf generally hold assets that are in default, with little prospect for recovery of principal or interest.

Note these ratings are <u>not based on volatility</u> and there is some text explaining the meaning of the risk rating.

FinaMetrica's investment risk and return guide for Canada

- ".. The past as an indicator of the future Though past investment history is not at all guaranteed to repeat, it can be a very useful guide, especially in seeing the contrast between performance of different portfolio allocations over different time periods, varying through good or poor economic growth, high or low inflation, rising or falling interest rates, wars, recessions and the like. Fortunately, there are several free online resources that allow us to see what happened in the past.
- 1) <u>FinaMetrica's Investment Risk and Return Guide and Reports for Canada</u> The Guide gives the breakdown of 11 portfolios ranging from Very Conservative to High Growth, containing a progressive mix of cash, two types of bonds and three types of stocks. The portfolios are realistic and could be purchased today using index ETFs. The downloadable pdf Reports of five pages for each portfolio describes investment outcomes in very informative tables and charts that really gives a sense of the risk involved for the data period covered of 1973 to 2012. An interesting unique feature is that the reports compare portfolio performance to GICs. Below is a sample image of some of what appears in the report for Portfolio 7 (60% equity, 40% fixed income). The 10-year result for an investment starting in 1973 was decidedly disappointing compared even to one starting in 2003. Recall that inflation raged in the 1970s and the bond holdings took a big hit. Do we want to bet that inflation will remain under control and interest rates won't rise a lot, which would again hit bonds hard?...". Thanks to Jean Lesperance

Regulatory Guide RG 228 Prospectuses: Effective disclosure for retail investors

 $\frac{http://www.asic.gov.au/asic/pdflib.nsf/LookupByFileName/rg228-published-10-November-2011-1.pdf/sfile/rg228-published-10-November-2011-1.pdf}{}$

IOSCO Principles on Point of Sale Disclosure Final Report 01022011

 $\frac{http://www.investorpos.com/documents/IOSCO\%20Principles\%20on\%20Point\%20of\%20Sale\%20Disclosure\%20Final\%20Report\%2001022011.pdf$

The uses and limits of volatility Investopedia

http://onswipe.investopedia.com/investopedia/#!/entry/the-uses-and-limits-of-volatility,5228c469da27f5d9d017a727/1

Indian Mutual Fund plans will carry colour codes to signal risk grade, coding plan to help retail investors - Economic Times

http://articles.economictimes.indiatimes.com/2013-02-20/news/37200328_1_equity-savings-rajiv-gandhi-equity-vicky-mehta Read also http://www.sebi.gov.in/sebiweb/home/adsearch.jsp? type=advanced and Can assessing risk in mutual funds become easy with better colour codes? http://www.personalfn.com/knowledge-center/mutual-funds/views-on-news/13-08-26/can_assessing_risk_in_mutual_funds_become_easy_with_better_colour_codes.aspx

Risk assessment Moneymanagedproperly blog

http://moneymanagedproperly.com/Education%20Investor/Risk%20assessment.pdf

Communicating Risks and Benefits: An Evidence-Based User's Guide

http://www.fda.gov/downloads/AboutFDA/ReportsManualsForms/Reports/UCM268069.pdf

Making sense of mutual fund Risk. The CPA Journal

Financial Regulatory Disclosure: Embracing New Communications Channels by Neil Mohindra :: SSRN

http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2031035

Is point-of-sale disclosure a winning strategy? - Investment Executive

http://www.investmentexecutive.com/-/is-point-of-sale-disclosure-a-winning-strategy-

"...Firms and advisors who respond to the evolving disclosure landscape will distinguish themselves in a new world in which fiduciary responsibility is increasingly expected...."

Risk Disclosure by Mutual Funds (Sept. 1996)

http://www.stanford.edu/~wfsharpe/art/fer/fer96.htm

Mutual fund ratings and future performance

http://www.stat.berkeley.edu/~aldous/157/Papers/mutual funds.pdf

Management Expense Ratios (MER) influence return distribution

http://retirehappy.ca/management-expense-ratios-do-matter/ Respected blogger Jim Yih looked at the impact of actively- managed mutual fund fees for 4 major fund categories . He found" *Fees matter more over longer time frames*. When you look at 5 and 10 year returns, there is a greater correlation that funds with lower MERs have on average better performance. For example, if we look at the 25 funds with the lowest MERs and compare them to the 25 funds with the highest MERs, the returns on a 5 year basis were on average 50% higher. Over a 10-year period, funds with low MERs performed 25% better than funds with high MERs...." .Thus ,over the long term the risk of underperforming a benchmark increases due to fees; the amount of underperformance is material. During a market downturn ,the risk of losing money will be greater with high fee funds compared to lower cost counterparts.

Vanguard Principle 3: Minimize cost Impact of costs on return and risk of loss

https://personal.vanguard.com/us/insights/investingtruths/investing-truth-about-cost A powerful presentation on how fees impact return profile and risk.

Mutual Fund Risk Classification Methodology - a modest proposal

Respected fund blogger Jean Lesperance proposes MER fee bands as a good indicator of fund risk. He points out that "Regulators are <u>looking for a methodology</u> to stick a label on mutual funds that tells ordinary Joe investors how much risk they are taking on if they buy into the fund. The regulators want something that is easy to understand, easy to calculate and implement, stable through time, easy to monitor and uniformly applicable to all types of funds. The proposal is to use monthly volatility over the last ten years, expressed annualized, either of the fund itself if it has enough history, or its benchmark index to make a five level Low to High risk scale but is surprised that - **the ability of the risk measure to predict the chance and the size of potential loss** is curiously missing. Unlike temporary market volatility, MER money is gone, permanently lost to the investor, it's withdrawn every year. Interesting thought.

About retail investors

2012 IEF Adviser relationships and investor decision-making study

http://www.getsmarteraboutmoney.ca/en/research/Our-research/Documents/2012%20IEF%20Adviser %20relationships%20and%20investor%20decision-making%20study%20FINAL.pdf "In summary, advisors are the key influence in investor decision-making. Investors rely upon their advisor for planning and asset mix advice, as well as advice on what specific investments to buy. Other sources of information are secondary to the advisor's opinion. Investors trust their advisor to provide advice that benefits the client first. This trust is underpinned by a belief that their advisor has a legal responsibility to 'put the client's best interest first'. With this as a foundation of investor belief, investors find little reason to be concerned about fees, and perhaps as a result, fewer than half of advisors disclose what they are paid..." and "..Performance and portfolio mix dominate investment decisions, whether buying or deciding not to buy. Performance relative to similar investments, alternative investments and past earnings are all major considerations. Portfolio mix is a comparable factor. Risk of loss is a major factor only for deciding NOT to buy, and then, it is the single biggest factor in the decision...".

Shareholder assessment of Bond fund risk ratings

http://www.ici.org/pdf/rpt_bondfundrisk.pdf

Enhancing the client- advisor Relationship

http://www.onusconsultinggroup.com/uploaded files/InvestorAwarenessBooklet.pdf

Figuring out how much risk you need to take: HowtoInvestOnline: Risk Need http://howtoinvestonline.blogspot.ca/2013/12/risk-need-figuring-out-how-much-risk.html

Risk and a Investor Behaviour

http://www.investmentreview.com/files/2009/12/Risk Kalirai1.pdf

The Best Interest Standards and the Elderly - Canadian MoneySaver https://www.canadianmoneysaver.ca/the-best-interest-standards-and-the-elderly/

Mutual Fund Investors: Sharp Enough?

Who are mutual fund investors? The answer is critical to regulatory policy. The mutual fund industry portrays fund investors as diligent, fairly sophisticated, and guided by professional financial advisors. The SEC paints a more cautious portrait of fund investors, though touts improved disclosure by the fund industry as a sufficient antidote. However, an extensive academic literature finds that fund investors are unaware of the basics of their funds, pay insufficient attention to fund costs, and chase past performance despite little evidence that high past fund returns predict future returns. These findings suggest that policymakers should rethink current regulatory policy. Disclosure may not be enough. http://ideas.repec.org/a/ris/jofitr/0948.html

Risk appetite and attitudes of Retail investors with special reference to Capital Markets
http://www.researchgate.net/publication/228292745_Risk_Appetite_and_Attitudes_of_Retail_Investors_with_Special_Reference_to_Capital_Market/file/32bfe5147ee14126db.pdf [The retail investor's understanding of the way in which markets work, the nature of risk ,the pricing risk and utilizing risk

information in a way that's appropriate to their own circumstances, is still something that is missing-we've got a long, long way to go .This is one reason Kenmar have suggested a short CSA brochure on how to effectively use Fund Facts.]

Determinants of Retail Investors Behaviour and its Impact on Investment Decision | Abey Francis - Academia.edu

http://www.academia.edu/1169465/Determinants_of_Retail_Investors_Behaviour_and_its_Impact_on_Investment_Decision

Do investors care about risk?: Evidence from mutual fund flows

http://www.ou.edu/content/dam/price/Finance/Oklahoma_conference/2011/Chris%20Clifford%20-%20Do%20Investors%20Care%20about%20Risk.pdf Using an extensive database compiled from SEC N-SAR filings, the researchers studied monthly flows to equity funds over the period 1996 to 2009. Unlike most previous studies, they separately examined inflows, outflows, and net flows. They found clear evidence that investor inflows and outflows strongly chase past raw performance without regard to risk. In fact, the best performing funds are typically among the riskiest funds, so return chasing leads to apparent risk-seeking behavior for inflows. This behavior is particularly strong for retail investors the study found, but return chasing is also prevalent for institutional investors.

AAII on risk http://www.aaii.com/enewsletter/aaiiupdate/20131205nm.html "...I do agree that risk and volatility are different. Volatility is a measurement of fluctuations in an security's price, not whether a security rose or fell in price. In a rising market, volatility can be an investors friend; in a falling market, it isn't. Volatility is a characteristic of a price return that leads to a loss of capital, but risk is the possibility of losing purchasing power...".

Characteristics of [U.S.] Mutual Fund Investors, 2013 ICI http://www.ici.org/pdf/per19-10.pdf

Volatility measures behavioural risk « The Wealth Steward (Dan Hallett) http://thewealthsteward.com/2010/10/volatility-measures-behavioural-risk/

"...Critics of the investment industry will point to fees as a big culprit. And they have a point. But just like the balanced fund illustration above, the impact of investor behaviour dwarfs the importance of fees. So I was wrong to dismiss standard deviation as a risk measure for all of those years. It's not a measure of investment risk but a measure of behavioural risk. Still, standard deviation measures a type of risk that has potentially damaging consequences...".

Using and analysing focus groups limitations and possibilities:, Smithson http://www.sfu.ca/cmns/courses/2008/801/Fall2008/ClassFolders/Soerensen,%20Maria%20Odgaard/Smithson_Using%20and%20analysing%20focus%20groups_%20limitations%20and%20analysing%20focus%20groups_%20limitations%20and%20possibilities.pdf

Focus Groups / Issues including advantages and disadvantages

 $\frac{http://focusgroups.pbworks.com/w/page/5677430/Issues\%20including\%20advantages\%20and\%20disadvantages}{\%20disadvantages}$

Loss aversion - Wikipedia, the free encyclopedia

http://en.wikipedia.org/wiki/Loss_aversion "In economics and decision theory, loss aversion refers to people's tendency to strongly prefer avoiding losses to acquiring gains. Some studies suggest that losses are twice as powerful, psychologically, as gains.[citation needed] Loss aversion was first demonstrated by Amos Tversky and Daniel Kahneman.[1] .."

If Index Funds Perform Better, Why Are Actively Managed Funds More Popular?

Knowledge@Wharton

http://knowledge.wharton.upenn.edu/article/if-index-funds-perform-better-why-are-actively-managed-funds-more-popular/

An analysis of investor risk perceptions

http://ccsenet.org/journal/index.php/ijbm/article/download/1762/1673

Investor behaviour in the mutual fund industry

https://www.escholar.manchester.ac.uk/api/datastream?publicationPid=uk-ac-mansew:208218&datastreamId=FULL-TEXT.PDF

Financial Regulatory Disclosure: Embracing New Communications Channels

http://poseidon01.ssrn.com/delivery.php?

 $\frac{\text{ID} = 79807411606400007406708707800011701106108803806508606810711910201102901410009312}{41051060420081221061000150231041170040291220880070830950160440900160760040880120920}{06051093045126124029008105124031006064103\&\text{EXT} = \text{pdf}}$

Does Simplified Disclosure Affect Individuals' Mutual Fund Choices?

http://www.nber.org/digest/jul09/w14859.html Review of SEC mandated Summary prospectus

The effects of summary information on consumer perceptions of mutual fund characteristics. - Free Online Library

 $\underline{http://www.thefreelibrary.com/The+effects+of+summary+information+on+consumer+perceptions+of+mutual...-a0177101903}$

CSA 2012 Investor Index

Key findings show that almost 30 %t of Canadians surveyed believe they have been approached with an investment fraud at some point in their life. Over half agreed they were just as likely to be a victim of investment fraud as anyone else. However, just 29 % of those who believe they have been approached with a fraudulent investment said they reported the most recent occurrence to the authorities. The *Investor Index* also shows that the overall investment knowledge of Canadians is low, with 40 per cent of Canadians failing a general investment knowledge test. According to the findings, 57 % of Canadians say they are confident when it comes to making investment decisions. Yet most Canadians have unrealistic expectations of market returns. When asked what they think the annual rate of return on the average investment portfolio is today, only 12 % of Canadians gave a realistic estimate, while 29 % provided an unrealistic estimate and 59 % explicitly chose not to hazard a guess. Nearly

half of Canadians (49 per cent) say they have a financial advisor, up from 46 % in 2009 and 42 per cent in 2006. However, 60 % of those with a financial advisor have not ever completed any form of background check on their advisor. Thirty-one per cent of Canadians say they have a formal written financial plan, up from 25 % in 2009. Although more Canadians have a financial plan, they are reviewing it less frequently (78 % say they reviewed their plan in the past 12 months, down from 83 % in 2009). http://www.securities-administrators.ca/investortools.aspx?id=1011

Canadians know little about investing | Benefits Canada

http://www.benefitscanada.com/news/canadians-know-little-about-investing-46677

Canadians might have to hit the books and brush up on their knowledge of investing. The *Bridgehouse Investor Knowledge Index* shows that participants scored an average of 39% in a survey that measured Canadian investors' understanding of investment terms and concepts. Seventy-two percent of participants noted they would like to learn more about investing to help them manage their finances more effectively, and 93% want the education system to include lessons covering basic investing and financial principles. Other highlights from the survey show the following:

- While most Canadians were comfortable with the definition of bonds (70%) and equities (71%), few knew that different tax rates applied to different types of investment income: only 43% were aware that interest earnings were taxed at the highest rate, while just 24% knew that capital gains receive the most favourable tax treatment.
- Most investors have a misconception about Canada's relative size in global equity markets: 27% underestimate its size, 27% overestimate its size, and 23% have no idea what size it is.
- Dollar-cost averaging is a concept that's not familiar to most Canadians (63% got the definition wrong).
- ³⁵ 62% of Canadians don't know the difference between active and passive investing.
- Eight years after the federal government lifted the foreign content restriction, 82% of Canadians still believe there are limits in their portfolios.

Such studies confirm that financial advisors need to operate under a Best interests standard. As Canadians age, investor vulnerability increases.

Mutual Fund Performance Advertising: Inherently and Materially Misleading? by A. R. Palmiter, Ahmed Taha :: SSRN

http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1761552

The determinants of the risk perceptions of investors

http://www.iassa.co.za/articles/044_sum1997_05.pdf

Mutual fund costs: Risk without reward

http://www.personalfund.com/RiskWithoutReward.pdf Paper shows how costs ,portfolio turnover and taxes reduce returns and add to shortfall risk.

Worthless Warnings? Testing the Effectiveness of Disclaimers in Mutual Fund Advertisements by M.Mercer, A.R. Palmiter, Ahmed Taha :: SSRN

http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1586530

Limited Attention and the Uninformative Persuasion of Mutual Fund Investors

http://www.fma.org/Chicago/Papers/FalseRreturnFMA.pdf

A Tree Grows in Mutual Funds: Does the Name Define the Product?

http://www.desantisbreindel.com/trees-in-mutual-fund-names/

To disclose or not disclose after tax returns of mutual funds

http://www.ctf.ca/ctfweb/Documents/PDF/2003ctj/2003ctj5-mawani.pdf

About math/stats

What's wrong with multiplying by the square root of 12?

 $\underline{http://corporate.morningstar.com/US/documents/MethodologyDocuments/MethodologyPapers/Square} \\ \underline{RootofTwelve.pdf}$

Standard deviation and the Square Root of Time

http://www.gummy-stuff.org/square-root-time.htm

Fundata risk indices

http://www.fundata.com/FundIndices/IndicesDownloads/ProspectusRiskMethodology.pdf

What is the Risk in risk- adjusted mutual fund returns?

http://pages.nes.ru/agoriaev/papers/stutzer%20mutual%20fund%20ratings-%20what%20is%20the %20risk%20in%20risk-adjusted%20fund%20returns-.pdf

The mutual fund graveyard

https://advisors.vanguard.com/iwe/pdf/ICRMFG.pdf?cbdForceDomain=true Discusses the fund survivorship issue in detail and its impact on published data.

Fund flows snd Performance: Canadian Equity funds (2007)

http://www.investmentreview.com/files/2009/12/fundflowsandperformance1.pdf

SPIVA Canada-year-end-2012 performance data

http://www.spindices.com/documents/spiva/spiva-canada-year-end-2012-2.pdf

| Report 2: Survivorship: Ye Fund Category | Period | Count at Beginning of Period | Survivorship (%) |
|--|-------------|------------------------------|------------------|
| | renod | Count at Beginning of Ferrod | |
| Canadian Equity | One Year | 51 | 88.24 |
| | Three Years | 52 | 86.54 |
| | Five Years | 58 | 68.97 |
| Canadian Small/MidCap Equity | One Year | 31 | 96.77 |
| | Three Years | 37 | 81.08 |
| | Five Years | 47 | 59.57 |
| Canadian Div & Income Equity | One Year | 32 | 96.88 |
| | Three Years | 34 | 91.18 |
| | Five Years | 36 | 86.11 |
| U.S. Equity | One Year | | 84.62 |
| | Three Years | 71 | 74.65 |
| | Five Years | 87 | 57.47 |
| International Equity | One Year | 34 | 97.06 |
| | Three Years | 40 | 82.50 |
| | Five Years | 45 | 68.89 |
| Global Equity | One Year | 98 | 93.88 |
| | Three Years | 108 | 84.26 |
| | Five Years | 116 | 71.55 |
| Canadian Focused Equity | One Year | 58 | 81.03 |
| | Three Years | 65 | 70.77 |
| | Five Years | 73 | 61.64 |

Source: S&P Dow Jones Indices, Fundata. Data as of December 31, 2012 CIFSC categorizations. Financial information provided by Fundata Canada Inc. © Fundata Canada Inc. All Rights Reserved. There has been no reduction of fund expenses from index returns. Tables are provided for illustrative purposes. Past performance is not a guarantee of future results.

If one projects the 5-year data to 10 years, say for Canadian small/Mid cap, just 36 % (approximately) of funds would have 10-year records.

Data conditioning biases: Canadian Equity funds (2004)

http://www.richarddeaves.com/jbf04.pdf Gives an indication of the level of survivorship.

Survivorship bias: Canadian mutual funds (2000)

http://www.nlc-bnc.ca/obj/s4/f2/dsk1/tape3/PQDD 0015/MQ54304.pdf

Non-normality of market returns

http://www.jpmorganinstitutional.com/blobcontent/42/35/1159384839488 Non normality long.pdf

Fat tailed distribution: The Cauchy distribution

http://en.wikipedia.org/wiki/Fat-tailed distribution

The tail events are rarer for the Cauchy than for the Gaussian, but their values are more extreme. Sometimes a single event can comprise 99% of total variation, hence the "undefined variance".

Market behaviour

Moving beyond traditional Markowitz asset allocation

http://www.soa.org/files/pd/2012-ny-invest-sym-r5.pdf

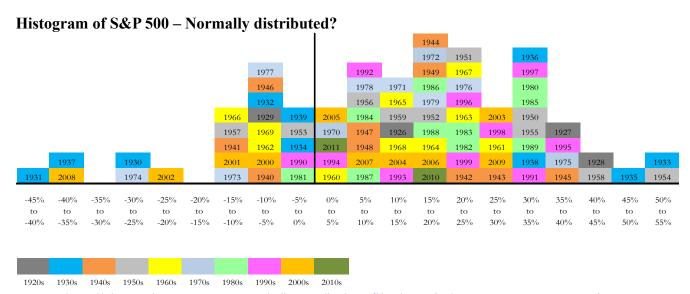
Volatility Indexes (Both underlying indices are provided by S&P Dow Jones Indices)

- (1) The S&P/TSX Composite Low Volatility Index is designed to measure the performance of the 50 least volatile stocks in the S&P/TSX Composite Index. Volatility is defined as the standard deviation of the security's daily price returns over the prior 252 trading days. Constituents are weighted relative to the inverse of their corresponding volatility, with the least volatile stocks receiving the highest weights.
- (2) The S&P 500[®] Low Volatility Index (CAD Hedged) is designed to replicate the returns of the S&P 500[®] Low Volatility Index (the "Underlying Index"), with all or substantially all of the direct U.S.-dollar exposure of the Underlying Index hedged back to the Canadian dollar. The Underlying Index is designed to measure the performance of the 100 least volatile stocks in the S&P 500[®] Index. Volatility is defined as the standard deviation of the security's daily price returns over the prior 252 trading days. Constituents are weighted relative to the inverse of their corresponding volatility, with the least volatile stocks receiving the highest weights. The Index hedges its beginning-of-period balances of its U.S.-dollar exposure back to the Canadian dollar by using rolling one-month forward contracts. Daily hedge returns are computed by interpolating between the spot price and the forward price.

My top 10 Peeves (Clifford Asness discusses risk and volatility issues) http://www.cfapubs.org/doi/pdf/10.2469/faj.v70.n1.2

Risk of investing in the S&P 500 index

http://myweb.whitman.syr.edu/rkshukla/Essentials/Risk/Risk of Investing in the SP500 Index.pdf



 $Source: \underline{http://classes.bus.oregonstate.edu/ba406/index_files/Brooks/2012\%20SP500\%20Histogram \underline{\%20FPS.ppt}$

Related products

TD Low Volatility Funds Rethinking Risk & Reward

https://www.cifps.ca/Public/Media/PDF/Conference2013_SpeakerPresentations/Babak_Rafat_Rethinking_Risk_&_Reward.pdf

Wrap accounts: The Real story

http://www.buildingwealth.ca/News/FeatureDetails.cfm?NewsletterID=3507&Type=F

Does total freedom boost returns? (Strategic asset allocation)

http://online.wsj.com/news/articles/SB10001424052970204466004577102482644384996 In the February/March issue of Morningstar Advisor magazine, Morningstar Investment Services CIO Jeff Ptak presents the update of a study measuring 100-plus tactical funds' performance from October 2007 through December 2011:http://advisors.morningstar.com/advisor/t/51504278/in-practice-tactical-funds-miss-their-chance.htm?q=tactical A key point of the findings is that most of the funds gained less over that stretch than Vanguard Balanced Index(VBINX) (an index fund maintaining a 60/40 split between stocks and bonds). The tactical funds were also more volatile and either more prone to losses or unable to keep up when the market rebounded.

Unwrapping wrap Accounts

http://www.advisor.ca/images/other/ae/ae 1103 unwrapping.pdf

Money market funds: Trading volatility for slim returns - The Globe and Mail http://www.theglobeandmail.com/globe-investor/investment-ideas/number-cruncher/money-market-funds-trading-volatility-for-slim-returns/article15729869/

Fund of Funds Risk Management

http://eurekahedge.com/news/09 feb Fund of Funds Risk Management 010.asp